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KAFIR SCORE CARD

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In order to establish uniformity in exhibits of kafir, milo and other grain sorghums and also to assist the exhibitor in preparing material and to aid judges in rendering the best possible service, the Agronomy Department of the A. and M. College has prepared a new grain sorghum score cord, including full explanations of all points considered.

Considerable work has been done in the last three years preparing score cards for kafir and other grain sorghums, much has been written also in the leading farm papers upon this subject. In the preparation of this score card all available sources of information have been freely drawn upon and an attempt has been made to present a score card that will represent as fully as possible all the reliable information obtainable on the subject.

A. & M. COLLEGE SCORE CARD FOR KAFIR, MILO AND OTHER GRAIN SORGHUMS

Head Samples

Points.	Value.	Score.
Uniformity of heads and kernels	20	
Shape of heads	10	
Size of heads	5	
Arrangement of spikelets	20	
Shape of kernels	5	
Size of kernels	5	
Color of kernels and glumes	5	
Freedom from shattering	5	
Exsertion	10	
Market condition	15	
Total	100	

Grain Samples

Points.	Value.	Ccore.
Uniformity in size and color	20	
Shape and size of kernels	20	
Market condition	35	
Weight per bushel	25	
Total	100	

EXPLANATION OF POINTS

Head Exhibits

Uniformity.—The ten or more heads in the sample should be similar in size, shape and color. In considering this point the exhibitor should not consider any specific size, shape or color, but rather that all heads should be similar in each of these respects. Uniformity is important because it indicates carefulness and clear thinking on the part of the exhibitor, and it also conveys to the judge an idea of the methods practiced in producing the heads.

Shape and Size.—Each grain sorghum has desirable standards of size and shape.

The heads of kafir should be cylindrical in shape and taper very

slightly at base and tip. They should be about eleven inches in length and nearly eight inches in circumference at the center.

The heads of milo should be ovate, tapering but slightly at base and tip. The length should be about six inches and the circumference at center about seven inches.

The heads of feterita should be cylindrical, tapering strongly at base and tip. The length should be about nine inches and the circumference at center about seven inches.

The heads of brown kaoliang should be slightly ovate, tapering at base and tip. Length should be about eight inches and circumference at center about seven inches.

The heads of white kaoliang are irregular in shape, flaring and open. They should taper strongly at base and tip. The length should be about nine inches.

Arrangement of Spikelets.—The spikelets or seed stems should be close together in the common types of the grain sorghums, except shallu and white kaoliang. A compact head indicates a high percent of grain. The spikelets should lie close together; should be short and thickly covered with seed, both on the inside and outside. Low-yielding or light heads have few or no grains on the inside of the spikelets and on the lower half of the spikelets. The joints of the main spikes or seed stems should be short. Short jointed main stems, five or more in number, indicate a large number of rows of spikelets. This gives a high yielding head. The spikelets should not grow too nearly erect or close to the main stem, but should extend outward, but not to such a degree as to make the head flaring or loose. While a reasonable degree of compactness is desired, yet the head should not be overly compact, for in such heads injury from moisture is likely to occur. This is especially true when the crop is grown in the more humid sections.

Shape and Size of Kernels.—The kernels of the different grain sorghums very materially in size and shape.

The kernels of the kafirs are medium in size and ovate, or egg-shaped, and slightly indented at the base.

The kernels of yellow milo are large and slightly flattened. In sudan durra and jerusalem corn the kernels are large and strongly flattened.

Brown kaoliang has fairly large, slightly flattened kernels, and white kaoliang has rather small, ovate kernels.

Color of Kernels.—The color of the kernels should conform to the type represented.

The kernels of yellow milo should be reddish-yellow or brown, with slightly darker colored glumes.

In sudan durra (feterita) the kernels are white or bluish-white, with glumes varying from almost black to almost white.

White milo has light colored kernels and glumes.

In white durra (jerusalem corn) the kernels and glumes are almost white.

Black-hulled kafir has black glumes and grayish-white kernels. Each kernel is characterized by a small pink speck at the top. This speck becomes darker in color after the heads are dried.

The kernels of red kafir are red or reddish-brown; the glumes are usually a little darker in color than the kernels.

Pink kafir, as the name indicates, has pink seeds and glumes, usually a little darker than the kernels.

White kafir differs from black-hulled kafir in that the glumes are white.

The kernels of white kaoliang are light and glossy, while the glumes are white or nearly white.

In brown kaoliang the glumes are dark reddish or reddish-brown and the kernels slightly lighter in color. Shallu has glossy, light colored seed with light colored glumes.

Freedom From Shattering.—Shattering is an objectionable feature in any of the grain sorghums. Shallu, sudan durra and jerusalem corn are especially weak in this respect. In examining the heads for the exhibit one should shake them, and if many of the kernels shatter out the head should be discarded.

Exsertion.—The heads in the sample should have been fully exserted from the boot or upper leaf sheath. If the lower spikelets are not filled out, or are moldy, poor exsertion is shown. Such heads should be discarded.

Market Condition.—The heads and the kernels should be in good market condition. In other words, there should be no evidence of decay, smut, mold, immaturity, or anything else that would affect the selling price.

EXPLANATION OF POINTS

Grain Exhibits

Uniformity in Size and Color.—The kernels should be uniform in size and color, for such a condition indicates good breeding, careful selection, evenness of maturity, and to a considerable extent desirable conditions of storage.

Shape and Size of Kernels.—The kernels should be full sized for the type represented, neither shriveled nor otherwise misshaped. The shape of kernels in the different types of grain sorghums should comply with the description given in the explanation of this point under "Head Samples".

Market Condition.—The grain should be sound and be free from dirt, must and other foreign material.

Weight per Bushel.—The weight per bushel varies slightly with the different types—no standard weights have been adopted for any of the grain sorghums. Kafir weighs approximately fifty-six pounds per measured bushel, and this weight is almost universally established. The weight used for kafir is adopted in practically all local markets for all other grain sorghums.